

**The Eleventh Annual North/South Dialogue and  
Alberta College Mathematics Conference  
Mount Royal University, Calgary, Alberta,  
May 6, 2011**

<b>Time &amp; Room</b>	<b>Speaker(s)</b>	<b>Title</b>	<b>Abstract/Description</b>
8:30 am – 9:00 am EA 1014	REGISTRATION AND EARLY MORNING COFFEE BREAK – BEVERAGES AND SOME BAKERY ITEMS PROVIDED		
9:00 am – 9:15 am EA 1031	Bryan Lane, Dean, Faculty of Science and Technology, Mount Royal University	Greetings from the University and Organizers	
<b><u>Session facilitator: Carlos Videla</u></b>			
9:20 am – 9:50 am EA 1031	K. Bauer University of Calgary	(topology),	
9:55 am – 10:25 am EA 1031	Rem Kooistra Kings University College	Bott-Chern cohomology and Algebraic Approaches to Non- Algebraic Complex Manifolds.	This talk seeks to introduce an audience of mathematicians from many backgrounds to the idea of Bott-Chern cohomology on a complex manifolds. I will discuss how it differs from the standard DeRahm cohomology, particularly for manifolds which are not Kähler. From this perspective, I'll talk briefly about the general project of looking at non-algebraic complex manifolds using methods similar to those of algebraic geometry. In particular, I'll argue that Bott-Chern cohomology and similar theories show promise as non-algebraic analogues for the targets of regulator maps.

10:30 am –11:00 am. EA 1031	Vincent Bouchard University of Alberta		
11:00am–12:00noon FACULTY CENTER	<b>Lunch</b>		
<b><u>Session facilitator: Shawn Liu</u></b>			
12:00noon–12:30pm. EA 1031	G. Gour University of Calgary	(quantum information)	
12:35 am – 1:05 pm EA 1031	Muhammad N. Islam Grant MacEwan University	Design and analysis of science fair data	The most difficult job for the Science fair council is to make the finalists. In a science fair project, a judge has to examine several areas such as scientific thought, original creativity, display, and project summary and it is not an easy job. Judges are different and their effects on the finalists should be minimized. In cases where the number of judges is less compared to the number of projects to be judged, the best way is to assign the judges to various projects using a randomized block design and analyze the judges' marks for the finalists. In this talk it will be shown how the finalists could have been selected using data from 2009 Edmonton Regional Science fair in two categories.
1:10 pm – 1: 40 pm	Cristian Ivanescu,		

EA 1031	Grant MacEwan University		
1:45 pm – 2:15 pm EA 1031	B. Brenken University of Calgary	(analysis),	
2:15 pm – 2:30 pm EA 1014	<b>Coffee Break</b>		
<b><u>Session facilitator: Wehua He</u></b>			
2:30 pm – 3:00 pm EA 1031	Maryna Yaskina, MacEwan University Wiley Book Representative	Non-symmetric convex bodies and the Fourier transform.	We derive formulas for the Fourier transform of homogeneous functions which are not necessarily even. We apply these formulas to the problem of unique determination of convex bodies. We also develop a new approach to Christoffel's problem.
3:05 pm – 3:35 pm EA 1031	Wiley Book Representative	WileyFLEX - Flexible Options for Students and Instructors.	With today's ever-changing student needs and instructor desires to customize course materials Wiley has created WileyFLEX. Flexible pricing and flexible formats.
3:40 pm – 4:40 pm EA 1024	<b>Panel Discussion: Undergraduate Research</b> <b><u>facilitator: Peter Zizler</u></b>		

DR. R. E. H.